### COMMONWEALTH OF KENTUCKY

### BEFORE THE PUBLIC SERVICE COMMISSION

\* \* \* \*

In the Matter of

THE APPLICATION OF BARKLEY LAKE WATER DISTRICT, (1) FOR A CERTIFICATE THAT PUBLIC CONVENIENCE AND NECESSITY REQUIRES THE CONSTRUCTION OF NEW PLANT FACILITIES; AND (2) SEEKING APPROVAL OF THE ISSUANCE OF CERTAIN SECURITIES; AND (3) FOR AN ORDER AUTHORIZING ADJUSTMENT OF WATER SERVICE RATES AND CHARGES.

CASE NO. 8937

### ORDER

IT IS ORDERED That Barkley Lake Water District shall file an original and 8 copies of the following information with the Commission by the close of business December 20, 1983:

### Deficiencies in Filing Requirements

- 1. Schedule of the present rates in effect and the changes desired to be made (shown in a comparative form as per 807 KAR 5:001, Section 9.1(b).
- 2. Statement setting forth estimates of the effect that the new rates will have upon the revenues of the utility, the total amount of money resulting from the increase, the percentage of increase, and the effect upon average customers' bills as per 807 KAR 5:001, Section 9.1(e).
- 3. An analysis of customers' bills covering the entire test year in such detail that the revenues from the present and proposed rates can be readily determined as per 807 KAR 5:001, Section 9.2(b). See attachment (Appendix A) for sample billing analysis.

IT IS FURTHER ORDERED That in the event the above information is not timely filed, the Commission may dismiss the case without prejudice absent a Motion for Extension of Time for good cause.

Done at Frankfort, Kentucky, this 6th day of December, 1983.

PUBLIC SERVICE COMMISSION

For the Commission

ATTEST:

Secretary

### APPENDIX A

APPENDIX TO AN ORDER OF THE PUBLIC SERVICE COMMISSION IN CASE NO. 8937 DATED DECEMBER 6, 1983.

### **BILLING ANALYSIS**

The billing analysis is the chart reflecting the usage by the customers as well as the revenue generated by a specific level of rates. A billing analysis of both the current and proposed rates is mandatory for analysis of a rate filing. The following is a step-by-step description which may be used to complete the billing analysis. A completed sample of a biling analysis is also included.

### a. Usage Table (Usage by Rate Increment)

Information needed to complete the usage table should be obtained from the meter books or other available usage records. The usage table is used to spread total usage into the proper incremental rate step. Initial recording of usage should be in 100 gallon increments. Where there are only a few very large users or contract customers, actual usage should be used. Usage between 0-100 gallons should be shown as 100, between 101-200 as 200, etc. The usages and customers are then combined for purposes of the usage table as follows:

Column No. 1 is the incremental steps in the present or proposed rate schedule for which the analysis is being made. Column No. 2 is the number of bills in each incremental rate step. Column No. 3 is the total gallons used in each incremental rate step. Columns Nos. 4, 5, 6, 7, 8 and 9 are labeled to correspond to the incremental rate steps shown in Column No. 1 and contains the actual number of gallons used in each incremental rate step.

Example for completing Usage Table is as follows:

Column No. 1 is incremental rate steps.

Columns No. 2 and 3 are completed by using information obtained from usage records.

Columns No. 4, 5, 6, 7, 8, and 9 are completed by the following steps:

Step 1: 1st 2,000 gallons minimum bill rate level 432 Bills
518,400 gallons used
All bills use 2,000 gallons or less,
therefore, all usage is recorded in Column 4.

Step 2: Next 3,000 gallons rate level
1,735 Bills
4,858,000 gallons used
1st 2,000 minimum x 1,735 bills = 3,470,000
gallons - record in Column 4
Next 3,000 gallons - remainder of water over
2,000 = 1,388,000 - record in Column 5

. :

- Step 3: Next 10,000 gallons rate level
  1,830 Bills
  16,268,700 gallons used
  1st 2,000 minimum x 1,830 bills = 3,660,000
  gallons record in Column 4
  Next 3,000 gallons x 1,830 bills = 5,490,000
  gallons record in Column 5
  Next 10,000 gallons remainder of water over
  3,000 = 7,118,700 gallons record in
  Column 6
- Step 4: Next 25,000 gallons rate level
  650 bills
  15,275,000 gallons used
  1st 2,000 minimum x 650 bills = 1,300,000
  gallons record in Column 4
  Next 3,000 gallons x 650 bills = 1,950,000
  gallons record in Column 5
  Next 10,000 gallons x 650 bills = 6,500,000
  gallons record in Column 6
  Next 25,000 gallons remainder of water over
  10,000 gallons = 5,525,000 gallons record
  in Column 7
- Step 5: Over 40,000 gallons rate level
  153 bills
  9,975,600 gallons used
  1st 2,000 minimum x 153 bills = 306,000
  gallons record in Column 4
  Next 3,000 gallons x 153 bills = 459,000
  gallons record in Column 5
  Next 10,000 gallons x 153 bills = 1,530,000
  gallons record in Column 6
  Next 25,000 gallons x 153 bills = 3,825,000
  gallons record in Column 7
  Over 40,000 gallons remainder of water over
  25,000 = 3,855,600 gallons record in
  Column 8
- Step 6: Total each column for transfer to Revenue Table.

### b. Revenue Table (Revenue by Rate Increment)

Revenue Table is used to determine the revenue produced from the Usage Table. Column No. 1 is the incremental rate steps in the rate schedule for which the analysis is being made. Column No. 2 indicates the total number of bills. Column No. 3 is the number of gallons accumulated in each rate increment (Totals from Columns 4, 5, 6, 7 and 8 of the above usage table). Column No. 4 is the rates to be used in determining revenue. Column No. 5 contains revenue produced.

Example for completing Revenue Table is as follows:

Complete Columns no. 1, 2 and 3 using information from Usage Table.

Complete Column No. 4 using rate either present or proposed.

Column No. 5 is completed by first multiplying the bills times the minimum charge.

Then, starting with the second rate increment, multiply Column No. 3 by Column No. 4 and total.

# Revenue from Present/Proposed Rates

Test Period from 1-1-81 to 12-31-81

### . USAGE TABLE Usage by Rate Increment

| Total |                                       |           |     |  | 10,000 | . An one Callons | 25,000 Gallons                                 | 10,000 0012000 | TO OHO Callone | 3,000 Gallons | 6,000     | 2 (100: Martinal Bill | •     | (2)          | 3                                     |          | ys: Residential |
|-------|---------------------------------------|-----------|-----|--|--------|------------------|--|----------------|----------------|---------------|-----------|-----------------------|-------|--------------|---------------------------------------|----------|-----------------|
| 4,000 | 7 800                                 |           |     |  |        | 153              | 650  | 250            | 1,830          | 1,700         | 25.6      | 4,32                  | OTTIB |              | (2)                                   |          | •               |
|       | 46,895,700                            |           |     |  |        | 9,9/3,000        |  | 15 275 000     | 10, 200, 700   | 1             | 4 858,000 | 1                     | 200   | Callons/MCF  | (3) Next 25,000 Over 40,000           | (3)      |                 |
|       | 9, 254, 400 9, 287, 000 123, 138, 133 |           |     |  |        |                  | 106, 000 459,000 1,530,000 2,823,000 3,023,000 | 1 300,000      |                | 3 000 000 5   | 7,4/0,000 | 2000                  | 200   | 1st 2,000 No | · · · · · · · · · · · · · · · · · · · | 6        |                 |
|       | 1, 287, 000 1                         | 200 500   |     |  |        |                  | 459,000  | 900,000        | 200            | 490.000       | , ,000    | 000 BBL               |       | X 2,000      |                                       | (S)      |                 |
|       | 1101100                               | S 148 700 |     |  |        |                  | 1,530,000                                      | 0,000,000      | 5 SON 000      | 7,118,700     |           |                       |       | 20,0         | 10.000                                | <u> </u> | <b>;</b>        |
|       |                                       | 9.350,000 |     |  |        |                  | 7 823,000                                      | 000            | 5. 525,000     |               |           |                       |       |              | Next 25,000                           | 3        | 9               |
|       |                                       | 3,855,000 | 222 |  |        |                  | 0,00,000                                       | 00% 258 5      |                |               |           |                       |       |              | Over 40,000                           |          | 8               |
|       |                                       | 0         |     |  |        |                  | Ļ  | 3              |                |               | 16        | 12                    | -     |              |                                       |          |                 |

### REVENUE TABLE

## Revenue By Rate Increment

|  |                            | - 40,000 Callons | 25,000 Gallons | C 10 000 CHAINES | and Callene | 1 000 Gallons | 2.000: Minimum Bill |                  | -         | 9       |     |  |
|--|----------------------------|------------------|----------------|------------------|-------------|---------------|---------------------|------------------|-----------|---------|-----|--|
|  |                            |                  |                |                  |             | L             | 4,800               |                  | _         | (2)     |     |  |
|  |                            | - 1              | 3.855.600 .75  |                  |             | _1_           | 1                   |                  | •         | (3)     |     |  |
|  | \$92,090.10 10101 1645.105 |                  | 01.16017       | 2 001 70         | 11.687.50   | 30, 297.40    | 23,217.50           | AA* KAA * 16.7 & | 00 000 00 | Revenue | (5) |  |